# Neutral Internet eXchange Czech Republic

Josef Chomyn, jch@nix.cz

October 8th 2009, RIPE-59 Lisbon
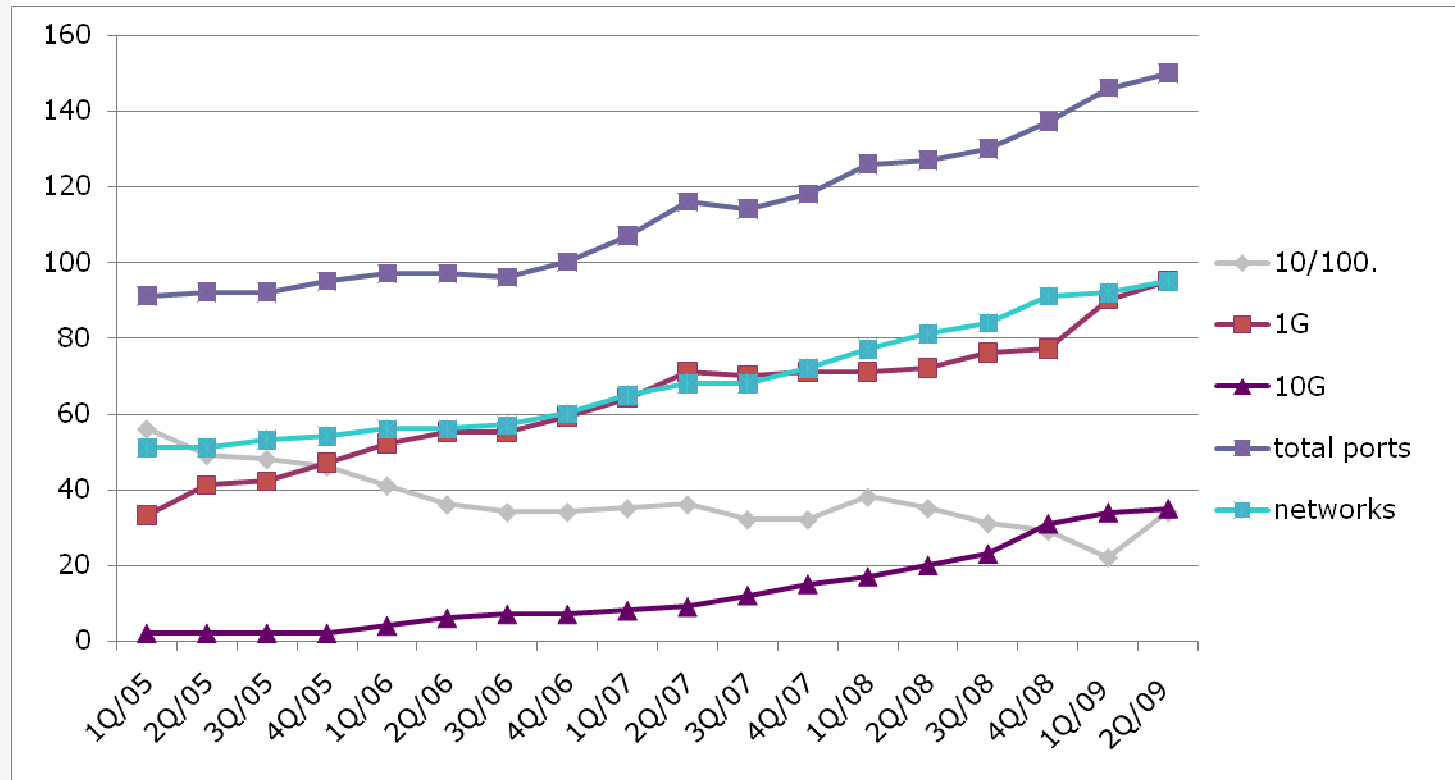
# NIX.CZ today – in numbers

- No.8 in Europe regarding traffic
- 10Gbps 2006 -› 97Gbps 2009
- 7 full-time employees
- 24/7 NOC
- 94 members/customers
- VAS - TLDs hosting (6)
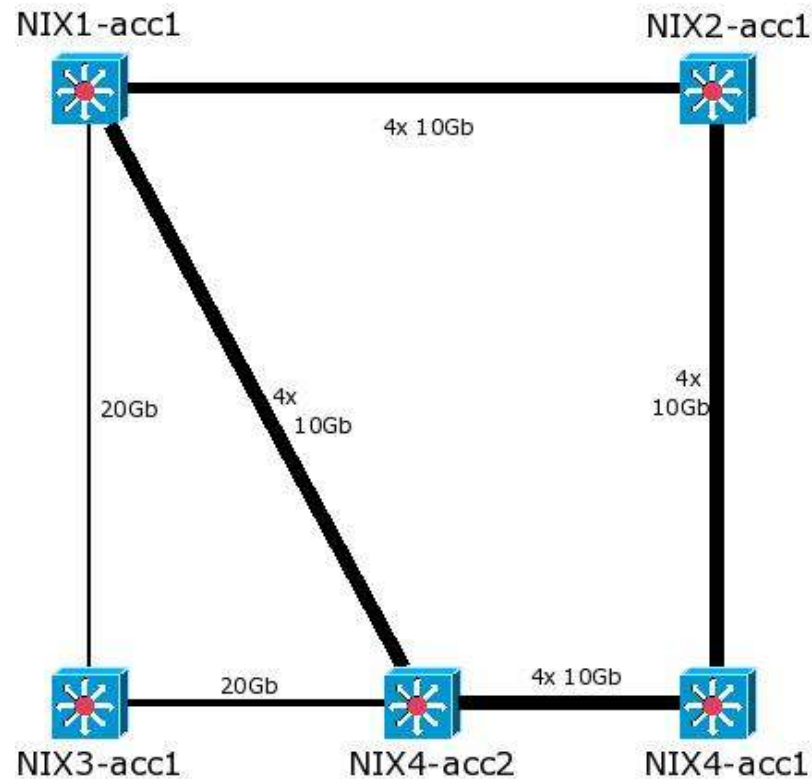- 150 connected ports
- 467Gbps capacity

# Increase in port numbers



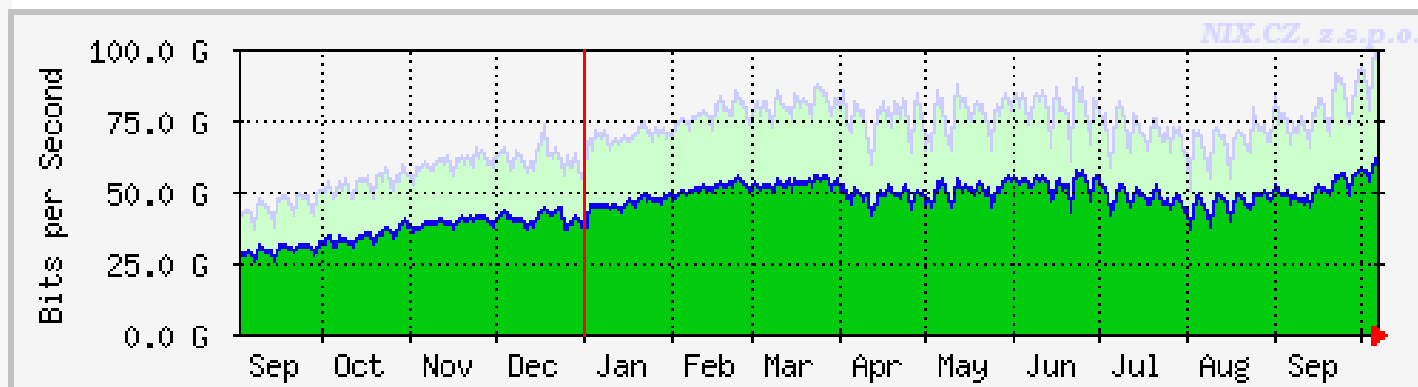| | 2Q/06 | 3Q/06 | 4Q/06 | 1Q/07 | 2Q/07 | 3Q/07 | 4Q/07 | 1Q/08 | 2Q/08 | 3Q/08 | 4Q/08 | 1Q/09 | 2Q/09 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10/100. | 36 | 34 | 34 | 35 | 36 | 32 | 32 | 38 | 35 | 31 | 29 | 22 | 34 |
| 1G | 55 | 55 | 59 | 64 | 71 | 70 | 71 | 71 | 72 | 76 | 77 | 90 | 95 |
| 10G | 6 | 7 | 7 | 8 | 9 | 12 | 15 | 17 | 20 | 23 | 31 | 34 | 35 |
| total ports | 97 | 96 | 100 | 107 | 116 | 114 | 118 | 126 | 127 | 130 | 137 | 146 | 150 |
| networks | 56 | 57 | 60 | 65 | 68 | 68 | 72 | 77 | 81 | 84 | 91 | 92 | 95 |

# Current topology



- 4 locations

- 5 switches

- primary ring
  *NIX1–NIX2–NIX4*
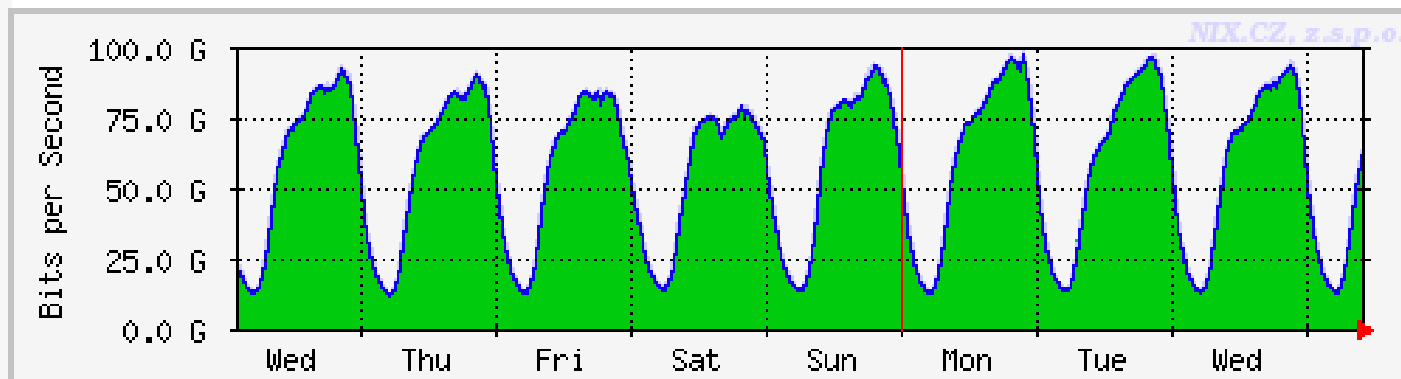
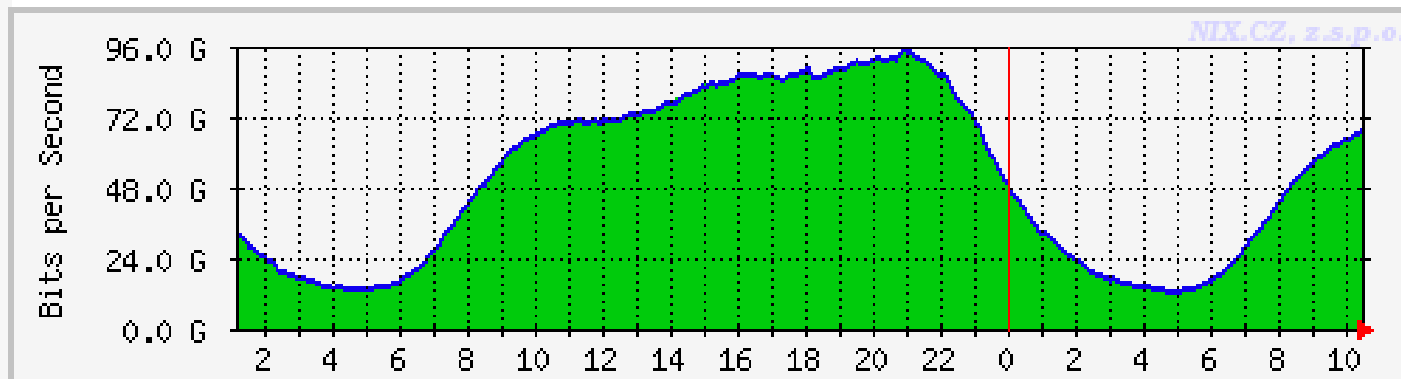- LR or DWDM
  XENPAKs
  between nodes

# Traffic statistics

- Exceeding 70 Gbps in December 2008
  (compared to 40 Gbps in May 2008)
- Stable growth until April 2009
- Stagnation during summer 2009
- Growth after the summer stagnation

# Traffic statistics

- Peak 97.2 Gbps
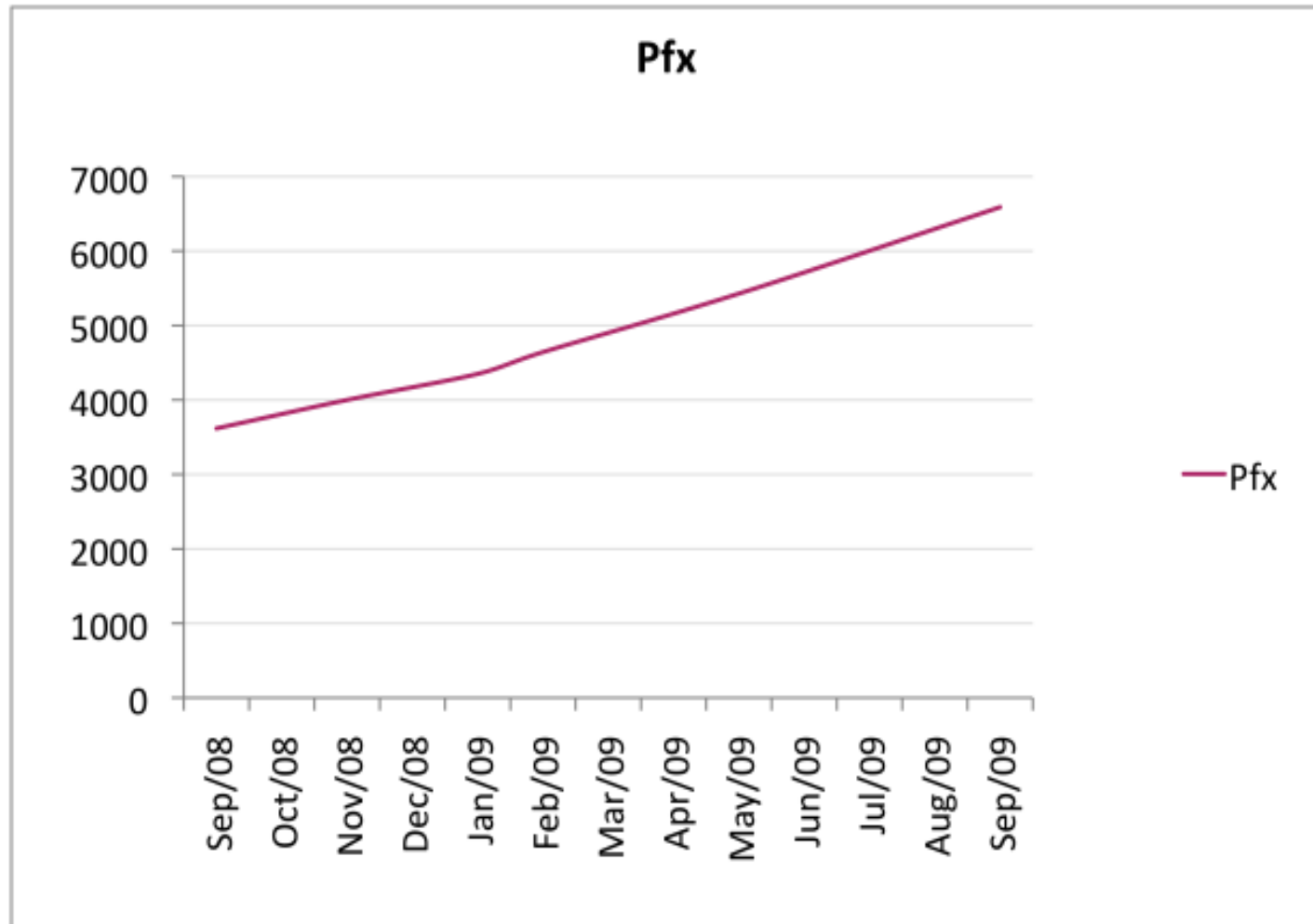
# NIX.CZ today - IPv6

- 100% IPv6 compatible
- IPv6 based peering since the beginning of 2003
- 47 connected ports today
- 30 connected companies
- 45 prefixes
- All internal services fully available
  - Routeservers, web servers, etc…

# Routeservers

- Officially launched 9/2008
- HW: 2 PCs on 2 locations, Quad Core Xeons
- SW: Linux (Bird), FreeBSD (Quagga)
- Peers on RS:
  - IPv4 - 48 peers (from 144 potential), 37 unique ASes
  - IPv6 - 19 peers (from 29 potential), 12 unique ASes

# Routeservers

- Presented by Ondrej Filip
  at RIPE Plenary, Friday, 11:00-12:30

- BIRD is an routing daemon for UNIX systems. It supports RIP, OSPF, BGP for IPv4 and IPv6. It is basically alternative to Quagga with some unique features.
- http://bird.network.cz/

# Future

- Price decrease from Jan 2010
- Hardware upgrade
- DWDM
- NIX.CZ & CZ.NIC as a host of RIPE 60 meeting in Prague in May 2010

# Questions ?

- [www.nix.cz](www.nix.cz)
- info@nix.cz